

Work Order ID 69062

Wednesday, April 27, 2011 11:31:06 AM

Page 1

Item ID: D3943-5

Accept

Revision ID:

Item Name: Plate

Start Date: 4/27/2011 Start Qty: 1.00

Required Date: 5/3/2011 Req'd Qty: 1.00

Reference:

Approvals:

Process Plan:

Date: 4/27

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Draw Nbr

Revision Nbr

D3943

C

100

0.00



Waterjet

FLOW CNC Waterjet

100 375 x 3.5"

Memo

1-Cut as per Dwg D3943

Dwg Rev: C

Prog Rev: C

2-Deburr if necessary

0.00

B11-5-3

(4)

110

QC2- Inspect parts off machine FAI/FAIB

0.00



QC

Quality Control

Memo

0.00

B11-5-3

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Page 2

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Reference:

Cust Item ID:

Customer:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start

Stop

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

120

QC8- Inspect parts - second check

0.00



8 ulos/04

QC

Memo

0.00

Quality Control

(X4)

130

Manufacture as per dwg

0.00



11/05/04

Mill Conv

Memo

0.00

Conventional Milling Machine

1-OPEN TO TAP DRILL SIZE FOR 5/8" THREAD

2-DRILL TAP 1/4"-28 AS PER DWG

3-MILL RAD

(3)

(1)

(PTO) →

140

QC5- Inspect part completeness to step on W/O

0.00



8 ulos/04

QC

Memo

0.00

Quality Control

(23)

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: D3843-5 PAR #: N/A Fault Category: Prod / Machine NCR ☒ Yes ☐ No DQA: 11/05/27 Date: 11/05/27
 Resolution: Scrap Disposition: Scrap QA: N/C Closed: 11/05/27 Date: 11/05/27

NCR: <u>69062</u>		WORK ORDER NON-CONFORMANCE (NCR) <u>28.63</u>						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
<u>11/05/24</u>	<u>130</u>	<u>1/4 X 28 + thread off center by .025</u> <u>RC: DAD STOOD AND LAOL OF ATTN.</u> <u>more like lack of Attent..</u>	<u>11/05/24</u> <u>BS1042</u>	<u>SCRAP + DESTROY.</u>	<u>11/05/24</u>	<u>11/05/24</u>	<u>11/05/24</u> <u>BS1042</u>	<u>11/05/24</u>

NOTE: Date & initial all entries

Work Order ID 69062

Wednesday, April 27, 2011 11:31:07 AM

Page 3

Item ID: D3943-5

Accept

Revision ID:

Item Name: Plate

Start Date: 4/27/2011 Start Qty: 1.00

Required Date: 5/3/2011 Req'd Qty: 1.00

Reference:

Cust Item ID:

Customer:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start
Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150	Identify as per dwg & Stock Location: <u>95</u>	0.00							
Packaging	Memo	0.00				11/5/24		428	
Packaging									
160	QC21- Final Inspection - Work Order Release	0.00							
QC	Memo	0.00							
Quality Control									

ME
11-05-25

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

Picklist Print

Page 1

Wednesday, April 27, 2011 11:31:12 AM

Work Order ID: 69062

Parent Item: D3943-5

Parent Item Name: Plate



Start Date: 4/27/2011

Required Date: 5/3/2011

Start Qty: 1.00

Required Qty: 1.00

Comments: Est Rev:A New Issue 09-06-03 JLM Verified By:EC IPP Rev:B as per
dwg REV.C DD 10.02.22 verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M1010B0.375X03.500		Purchased	No			100	f	7.5800	0.13	0.13	.5		
1010-1025 Steel Bar .375 x 3.500													

RB11-5-3

Location

Loc Qty

Loc Code

MAT036

7.58

110740

7.58

110740

9

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

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NOTE: Date & initial all entries

ITEM No.	QTY -041	QTY -051	QTY -053	PART NUMBER	DESCRIPTION	PREFERRED SUPPLIER
1	X			D3943-041	GROUND HANDLING CRANK ASSEMBLY	
5	1	X		D3943-051	HANDLE ASSEMBLY	
6	1		X	D3943-053	CHAIN ASSEMBLY	
11		1		D3943-1	HANDLE	M/F HANDLE FROM DIS-ASSEMBLED ITEM 39
12	1			D3943-3	HANDLE EXTENSION	
13		1		D3943-5	PLATE	
14		2		D3943-7	STUD	
15			1	D3943-9	CHAIN	USE CHAIN SUPPLIED WITH ITEM 39
21	1			D2690-4	LANYARD	
22	1			D3585-1	SET SCREW	
23	1			D3949-041	REMOVE BEFORE FLIGHT FLAG	
24			1	D3954-5	CHAIN LUG	
25	1			D3954-7	RATCHET LUG	
26			1	D3954-9	GWT CHAIN PIN	
31	1			AN5-11A	BOLT	
32	1			AN960-516	WASHER	
33	1			MS21042L5	NUT	
39	1			8143919	LEVER CHAIN HOIST (POWER FIST)	PRINCESS AUTO / 4000 lbs CAPACITY
41	1			S-1475	SPRING	REID SUPPLY
42	1			3408A59	BALL PLUNGER	McMASTER CARR
43	1			HX-15	SOCKET HEAD CAP SCREW 1/2-20 UNC X 0.75 LG	HASKINS
44	1			HX-16	SOCKET HEAD CAP SCREW 1/2-20 UNC X 1.0 LG	HASKINS

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 69062

11-09-27

RELEASED
2010-10-18
MP

C	RMV FINISH -041 (ZN A8-2), ADD NEW FINISH -051/-053/-1/-3 (A8-3/-4/-5), ADD CALIBRATION (A8-2), (1) HX-16 WAS HX-15 (B3-1, C3-1), PAR 10-001	CP	10.01.26
B	SHT 1 PL, ITEM 31 WAS AN4-10A, ITEM 32 WAS AN960-416, ITEM 33 WAS MS21042-4, ITEM 43 WAS 0.75 LG. SHEETS 2 - 5 NOTES: FINISH FOR ALL COMPONENTS NOW YELLOW SPRAY PAINT.	AJS	09.10.15
A	NEW ISSUE	AJS	09.05.13
REV.	DESCRIPTION	BY	DATE
DESIGN	DSTOW / AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	<i>MP</i>	DRAWING NO. D3943	REV. C SHEET 1 OF 5
CHECKED	<i>MP</i>	TITLE GROSS WEIGHT TOW CRANK ASSY	SCALE NTS
MFG. APPR.	<i>MP</i>	COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	
DE APPR.	N/A	DATE 10.01.26	

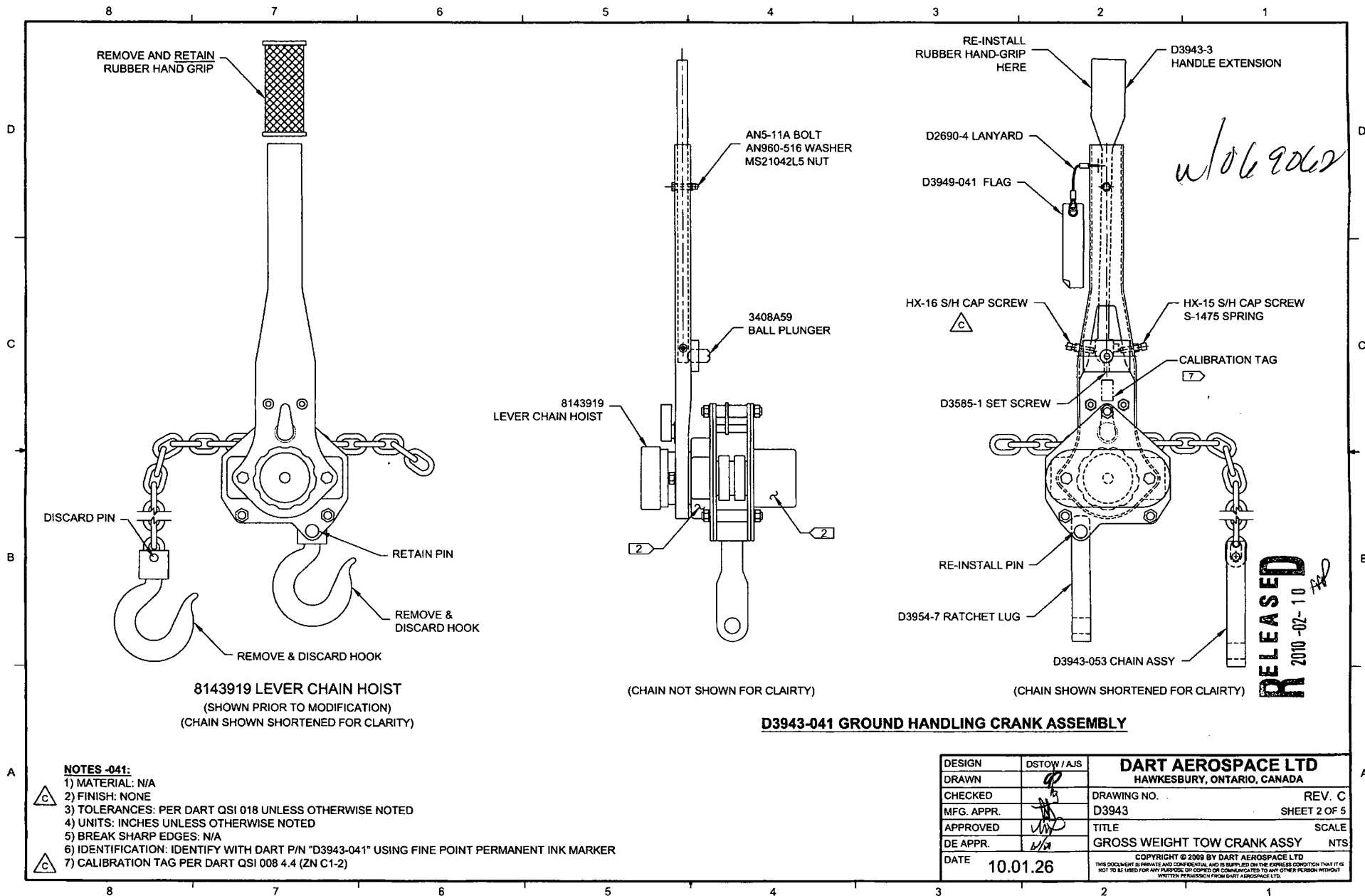
W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

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NOTE: Date & initial all entries



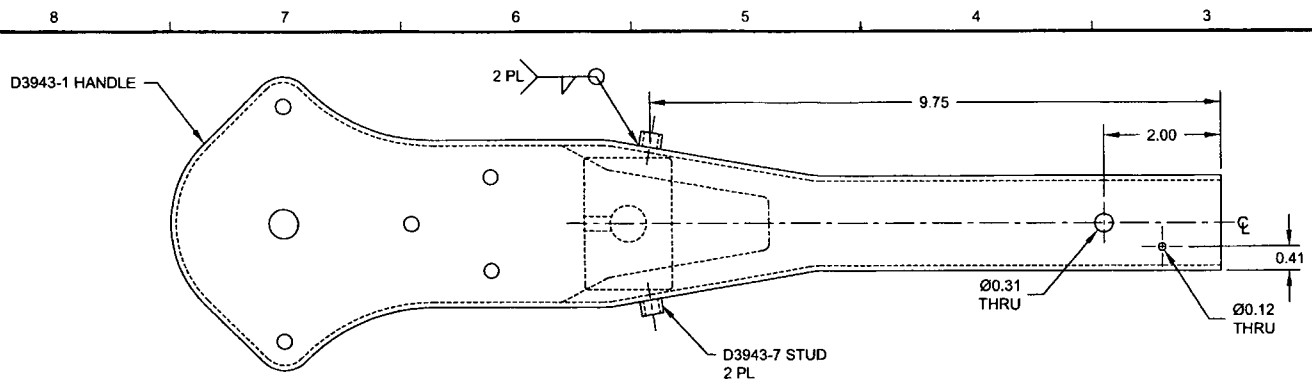
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

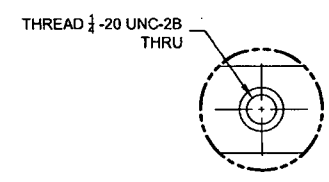
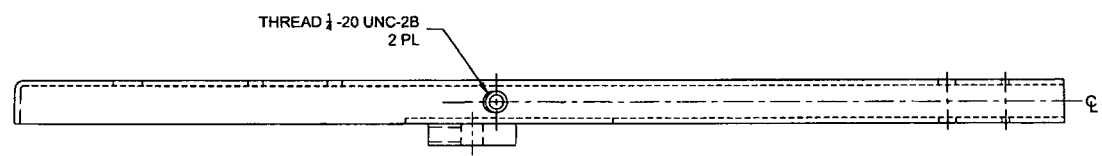
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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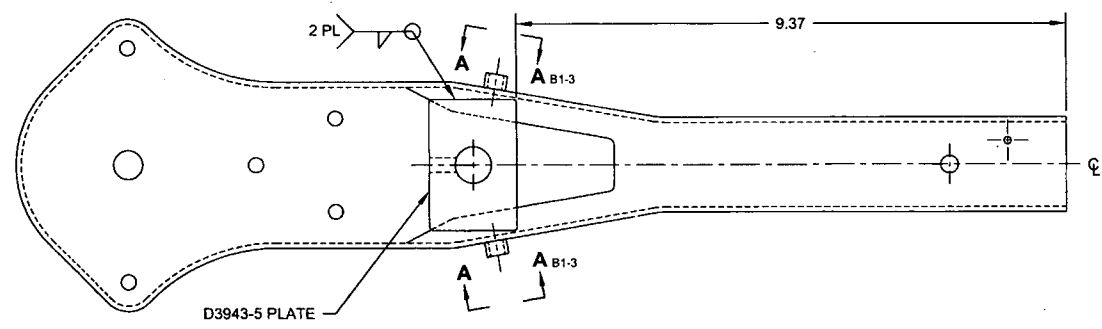
NOTE: Date & initial all entries



w/b 69062



VIEW A-A A5-3
B5-3
(SCALE 2X)



D3943-051 HANDLE ASSEMBLY

- NOTES -051:**
- 1) MATERIAL : N/A
 - 2) FINISH: POWDER COAT HYBRID SAFETY YELLOW (4.3.5.12) PER DART QSI 005 4.3
 - 3) TOLERANCES: X.XX DIMENSIONS +/- 0.06 ALL OTHERS
PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: N/A
 - 6) IDENTIFICATION: NONE
 - 7) MASK ALL THREADS PRIOR TO POWDER COATING

RELEASED
2010-02-10
mp

DESIGN	DSTOW / AJS	DART AEROSPACE LTD	
DRAWN	<i>qj</i>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. C
MFG. APPR.	<i>[Signature]</i>	D3943	SHEET 3 OF 5
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	N/A	GROSS WEIGHT TOW CRANK ASSY	NTS
DATE	10.01.26	<small>COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

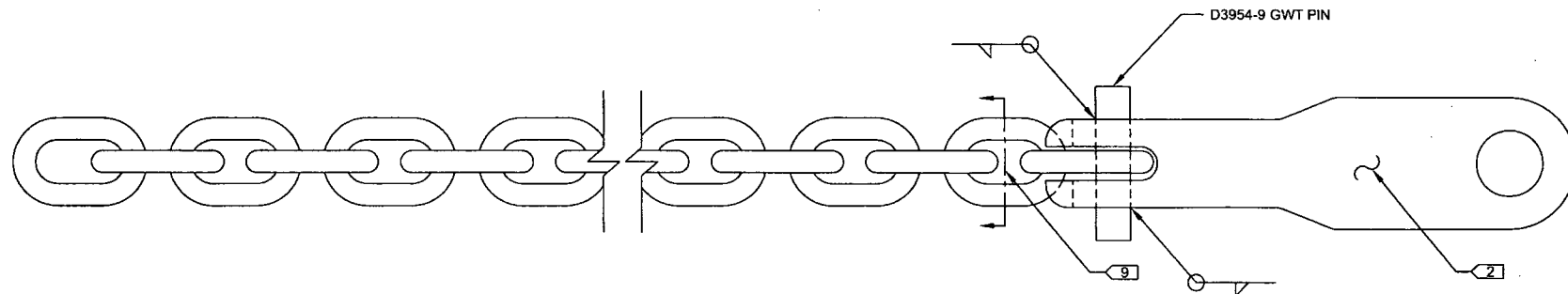
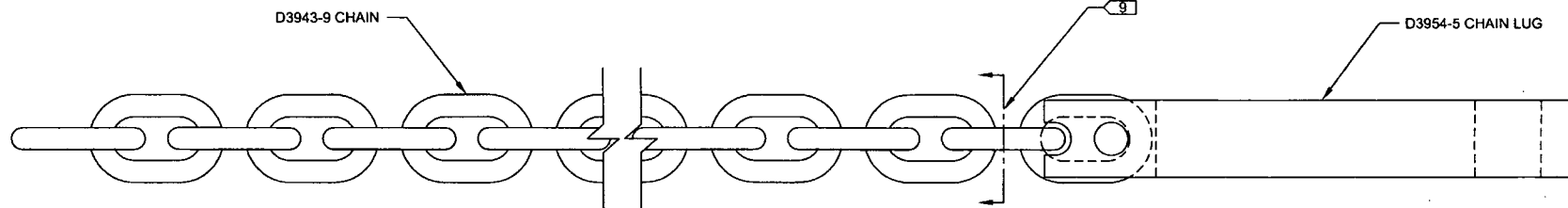
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

8 7 6 5 4 3 2 1

W/O COOLER



D3943-053 CHAIN ASSEMBLY

RELEASED
2010-02-10
WMP

NOTES -053:

- 1) MATERIAL: N/A
- 2) FINISH: POWDER COAT HYBRID SAFETY YELLOW (4.3.5.12) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: N/A
- 8) WELD PER QSI 004
- 9) MASK CHAIN FROM THIS POINT ON PRIOR TO POWDER COATING



DESIGN	DSTOW / AJS	DART AEROSPACE LTD	
DRAWN	<i>WMP</i>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>WMP</i>	DRAWING NO. D3943	REV. C
MFG. APPR.	<i>WMP</i>	TITLE	SHEET 4 OF 5
APPROVED	<i>WMP</i>	GROSS WEIGHT TOW CRANK ASSY	SCALE
DE APPR.	<i>WMP</i>	DATE	10.01.26
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8 7 6 5 4 3 2 1

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

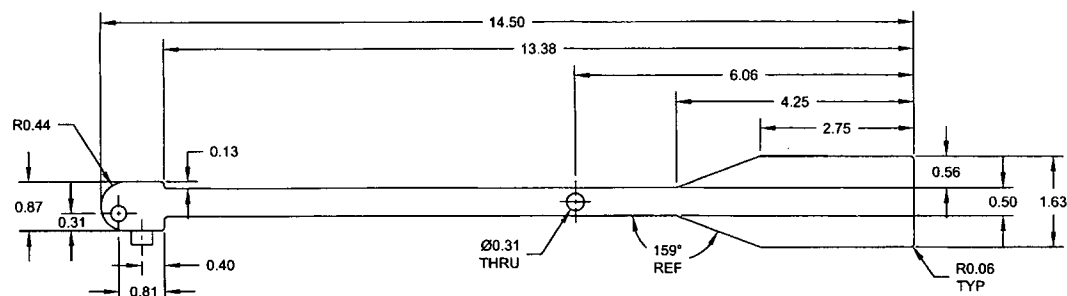
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

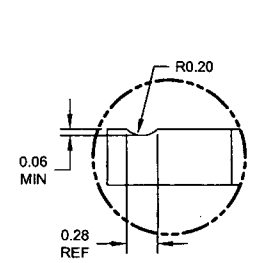
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8 7 6 5 4 3 2 1

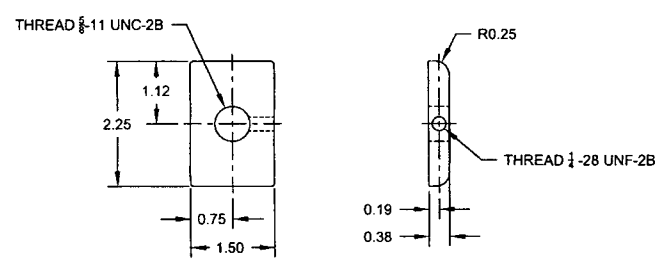


D3943-3 HANDLE EXTENSION

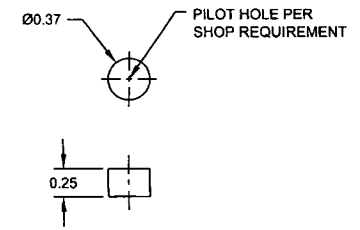


DETAIL B-B C7-5
(DIMPLE DETAIL)
(SCALE 2X)

u/o 69062



D3943-5 PLATE



D3943-7 STUD
(SCALE 2X)

- NOTES -11/-13:**
 1) MATERIAL -3 & -5: MILD STEEL, SHEET
 AISI 1010-1025 OR ASTM A36/A366/A1008
 OR CSA G40-21, 38W/44W/50W/60W/70W
 REF DART SPEC M1010-S
 OR : MILD STEEL, BAR
 AISI 1010-1025 OR ASTM A36/A366/A569/A570
 OR CSA G40-21, 38W/44W/50W/60W/70W
 REF DART SPEC M1010-B
 -7: MILD STEEL, ROUND BAR
 AISI 1018-1025
 PER MIL-S-7097
 REF DART SPEC M1018-R

- 2) FINISH -3: POWDER COAT HYBRID SAFETY YELLOW (4.3.5.12) PER DART QSI 005 4.3
 -5 & -7: NONE
 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 6) IDENTIFICATION: NONE

RELEASED
 2010-02-10

DESIGN	DSTOW / AJS	DART AEROSPACE LTD	
DRAWN	<i>qj</i>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. C
MFG. APPR.	<i>[Signature]</i>	D3943	SHEET 5 OF 5
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>N/A</i>	GROSS WEIGHT TOW CRANK ASSY	NTS
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